

LISTING OF CLAIMS:

Please amend the claims as follows.

1. (Currently Amended) A computer-implemented method for creating a graphical program, the method comprising:

creating a graphical user interface for the graphical program in response to first user input;

displaying a first node for receiving user interface events in a block diagram for the graphical program in response to second user input;

receiving third user input explicitly specifying one or more user interface events to configure for the first node, wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node is performed independently of configuring other nodes in the block diagram of the graphical program;

configuring the first node to receive the one or more user interface events explicitly specified by the third user input during execution of the graphical program; and

associating one or more portions of graphical code with the first node in response to fourth user input, wherein each portion of graphical code comprises one or more nodes for responding to one or more of the user interface events which the first node is configured to receive.

2. (Previously Presented) The method of claim 1,

wherein the first node comprises one or more sub-diagrams, wherein said associating the one or more portions of graphical code with the first node comprises displaying each portion of graphical code within one of the sub-diagrams of the first node.

3. (Previously Presented) The method of claim 2,

wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node comprises receiving user input

explicitly specifying one or more user interface events to which each of the sub-diagrams of the first node corresponds;

wherein for each portion of graphical code, displaying the portion of graphical code within one of the sub-diagrams of the first node comprises configuring the portion of graphical code to execute in response to the one or more user interface events to which the sub-diagram corresponds.

4. (Previously Presented) The method of claim 3,

wherein for each portion of graphical code, displaying the portion of graphical code within one of the sub-diagrams of the first node comprises displaying the one or more nodes of the portion of graphical code within one of the sub-diagrams of the first node.

5. (Original) The method of claim 1,

wherein the block diagram comprises a data flow block diagram.

6. (Previously Presented) The method of claim 1, further comprising:

executing the graphical program;

wherein one or more user interface events which the first node is configured to receive are generated during execution of the graphical program;

wherein the method further comprises executing one of the portions of graphical code associated with the first node in response to each of the one or more user interface events which the first node is configured to receive being generated during execution of the graphical program.

7. (Original) The method of claim 6,

wherein the one or more user interface events generated during execution of the graphical program are generated in response to user input to the graphical user interface of the graphical program.

8. (Original) The method of claim 6,

wherein, during execution of the graphical program, the block diagram executes on a first computer system and the graphical user interface is displayed on a display of a second computer system.

9. (Original) The method of claim 6,

wherein, during execution of the graphical program, the graphical user interface is displayed on a display of a computer system and the block diagram executes on a reconfigurable instrument connected to the computer system.

10. (Previously Presented) The method of claim 1,

wherein said configuring the first node to receive the one or more user interface events comprises configuring the first node to receive notification when the one or more user interface events are generated during execution of the graphical program.

11. (Previously Presented) The method of claim 1,

wherein said configuring the first node to receive the one or more user interface events comprises configuring the first node to receive information specifying occurrences of the one or more user interface events during execution of the graphical program.

12. (Previously Presented) The method of claim 1,

wherein each of the portions of graphical code associated with the first node is displayed within the first node.

13. (Previously Presented) The method of claim 1,

wherein said configuring the first node to receive the one or more user interface events comprises configuring the first node to receive a first user interface event;

wherein the first user interface event explicitly specifies a first user interface element of the graphical user interface and an action performed on the first user interface element.

14. (Original) The method of claim 13, wherein the first user interface element comprises one of:

- an indicator;
- a control;
- a menu element;
- a window.

15. (Previously Presented) The method of claim 1, further comprising:
displaying a first graphical user interface dialog for configuring the first node;
wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node comprises receiving user input to the first graphical user interface dialog to explicitly specify the one or more user interface events.

16. (Previously Presented) The method of claim 1, further comprising:
displaying a second node for dynamically registering user interface events in the block diagram in response to user input;

wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node comprises receiving user input explicitly specifying a first user interface event to dynamically register during execution of the graphical program;

wherein the method further comprises configuring the second node to dynamically register the first user interface event during execution of the graphical program such that, after registering the event, the first node becomes operable to receive the first user interface event.

17. (Previously Presented) The method of claim 16,
wherein said configuring the second node to dynamically register the first user interface event during execution of the graphical program comprises connecting the second node to the first node in response to user input.

18. (Previously Presented) The method of claim 1,
wherein the one or more user interface events specified by the third user input includes a first user interface event;

wherein the method further comprises displaying a second node for dynamically un-registering user interface events in the block diagram in response to user input;

configuring the second node to dynamically un-register the first user interface event during execution of the graphical program;

wherein, before said dynamically un-registering the first user interface event, the first node is operable to receive the first user interface event;

wherein, after said dynamically un-registering the first user interface event, the first node is not operable to receive the first user interface event.

19-66. (Canceled)

67. (Previously Presented) The method of claim 1, further comprising:

displaying a list of user interface events;

wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node comprises receiving user input to select the one or more user interface events from the displayed list of user interface events.

68. (Previously Presented) The method of claim 1,

wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node comprises receiving user input specifying names of the one or more user interface events to configure for the first node.

69. (Previously Presented) The method of claim 1,

wherein said associating the one or more portions of graphical code with the first node comprises associating a first portion of graphical code and a second portion of graphical code with the first node;

wherein the first node comprises a plurality of sub-diagrams;

wherein associating the first portion of graphical code with the first node comprises displaying the first portion of graphical code within a first sub-diagram of the first node; and

wherein associating the second portion of graphical code with the first node comprises displaying the second portion of graphical code within a second sub-diagram of the first node.

70. (Previously Presented) The method of claim 1, further comprising:

displaying one or more of the portions of graphical code associated with the first node in the block diagram of the graphical program.

71. (Previously Presented) The method of claim 1,

wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node comprises receiving user input explicitly specifying a first user interface event to be dynamically registered during execution of the graphical program;

wherein the method further comprises configuring the graphical program to dynamically register the first user interface event during execution of the graphical program;

wherein said dynamically registering the first user interface event enables the first node to receive the first user interface event.

72. (Previously Presented) The method of claim 1,

wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node comprises receiving user input explicitly specifying one or more user interface events to which each of the portions of graphical code associated with the first node corresponds.

73. (Previously Presented) The method of claim 1,

wherein each of the portions of graphical code is comprised within the first node.

74. (Previously Presented) The method of claim 1,
wherein each of the portions of graphical code is located separately from the first node.

75. (Previously Presented) The method of claim 1,
wherein for each of the portions of graphical code, said associating the portion of graphical code with the first node comprises associating the portion of graphical code with one or more of the user interface events which the first node is configured to receive, wherein the portion of graphical code comprises one or more nodes for responding to the one or more user interface events with which the portion of graphical code is associated.

76. (Previously Presented) The method of claim 1,
wherein said receiving third user input explicitly specifying the one or more user interface events to configure for the first node comprises receiving user input explicitly specifying a first user interface event and a second user interface event;

wherein said associating the one or more portions of graphical code with the first node comprises associating a first portion of graphical code with the first node, wherein the first portion of graphical code comprises a plurality of interconnected nodes visually indicating functionality for responding to the first user interface event;

wherein said associating the one or more portions of graphical code with the first node further comprises associating a second portion of graphical code with the first node, wherein the second portion of graphical code comprises a plurality of interconnected nodes visually indicating functionality for responding to the second user interface event.

77. (Previously Presented) The method of claim 76, further comprising:
executing the graphical program;
executing the first portion of graphical code associated with the first node in response to the first user interface event being generated during execution of the graphical program; and

executing the second portion of graphical code associated with the first node in response to the second user interface event being generated during execution of the graphical program.

78. (Previously Presented) The method of claim 1, further comprising:
displaying information explicitly identifying a plurality of user interface events;
wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node comprises receiving user input selecting the one or more user interface events from the displayed information.

79. (Previously Presented) The method of claim 1,
wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node comprises graphically connecting a plurality of objects to the first node in response to user input, wherein each object directly represents a user interface event.

80. (Previously Presented) The method of claim 1,
wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node does not include receiving user input specifying a connection between the first node and a second node.

81. (Previously Presented) The method of claim 1,
wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node is performed independently of configuring other nodes in the block diagram of the graphical program.

82. (Previously Presented) The method of claim 1, further comprising:
creating the portions of graphical code in response to user input, wherein for each portion of graphical code, creating the portion of graphical code comprises including one or more nodes in the portion of graphical code in response to user input, wherein the one

or more nodes are operable to respond to one or more of the user interface events which the first node is configured to receive.

83-86. (Canceled)

87. (Previously Presented) A computer-implemented method for creating a graphical program, the method comprising:

creating a first portion of graphical code in response to user input, wherein the first portion of graphical code comprises one or more nodes that visually indicate functionality for responding to programmatic events generated during execution of the graphical program; and

configuring the graphical program to dynamically register a first programmatic event during execution of the graphical program, wherein dynamically registering the first programmatic event comprises dynamically associating the first programmatic event with the first portion of graphical code;

wherein said dynamically registering the first programmatic event causes the first portion of graphical code to execute in response to the first programmatic event being generated.

88. (Previously Presented) The method of claim 87, further comprising:

receiving user input specifying the first programmatic event to be dynamically registered during execution of the graphical program;

wherein the graphical program is configured to dynamically register the first programmatic event during execution of the graphical program in response to the user input specifying the first programmatic event.

89. (Previously Presented) The method of claim 87,

wherein said configuring the graphical program to dynamically register the first programmatic event during execution of the graphical program comprises configuring a node in the graphical program to dynamically register the first programmatic event during execution of the graphical program.

90. (New) A computer-implemented method for creating a graphical program, the method comprising:

- creating a graphical user interface for the graphical program in response to first user input;

- displaying a first node for receiving user interface events in a block diagram for the graphical program in response to second user input;

- displaying a second node for dynamically registering user interface events in the block diagram in response to third user input;

- receiving fourth user input explicitly specifying one or more user interface events to configure for the first node, wherein said receiving the fourth user input explicitly specifying the one or more user interface events to configure for the first node comprises receiving user input explicitly specifying a first user interface event to dynamically register during execution of the graphical program;

- configuring the first node to receive the one or more user interface events explicitly specified by the fourth user input during execution of the graphical program, wherein configuring the first node to receive the one or more user interface events comprises configuring the second node to dynamically register the first user interface event during execution of the graphical program such that, after registering the event, the first node becomes operable to receive the first user interface event; and

- associating one or more portions of graphical code with the first node in response to fourth user input, wherein each portion of graphical code comprises one or more nodes for responding to one or more of the user interface events which the first node is configured to receive.

91. (New) A computer-implemented method for creating a graphical program, the method comprising:

- creating a graphical user interface for the graphical program in response to first user input;

displaying a first node for receiving user interface events in a block diagram for the graphical program in response to second user input;

receiving third user input explicitly specifying one or more user interface events to configure for the first node, wherein the one or more user interface events specified by the third user input includes a first user interface event;

configuring the first node to receive the one or more user interface events explicitly specified by the third user input during execution of the graphical program; and

associating one or more portions of graphical code with the first node in response to fourth user input, wherein each portion of graphical code comprises one or more nodes for responding to one or more of the user interface events which the first node is configured to receive;

displaying a second node for dynamically un-registering user interface events in the block diagram in response to user input; and

configuring the second node to dynamically un-register the first user interface event during execution of the graphical program;

wherein, before said dynamically un-registering the first user interface event, the first node is operable to receive the first user interface event;

wherein, after said dynamically un-registering the first user interface event, the first node is not operable to receive the first user interface event.

92. (New) A computer-implemented method for creating a graphical program, the method comprising:

creating a graphical user interface for the graphical program in response to first user input;

displaying a first node for receiving user interface events in a block diagram for the graphical program in response to second user input;

receiving third user input explicitly specifying one or more user interface events to configure for the first node, wherein said receiving the third user input explicitly specifying the one or more user interface events to configure for the first node comprises

receiving user input explicitly specifying a first user interface event to be dynamically registered during execution of the graphical program;

configuring the first node to receive the one or more user interface events explicitly specified by the third user input during execution of the graphical program, wherein configuring the first node to receive the one or more user interface events comprises configuring the graphical program to dynamically register the first user interface event during execution of the graphical program, wherein said dynamically registering the first user interface event enables the first node to receive the first user interface event; and

associating one or more portions of graphical code with the first node in response to fourth user input, wherein each portion of graphical code comprises one or more nodes for responding to one or more of the user interface events which the first node is configured to receive.